IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) In a machine vision system having a plurality of distinct and separate vision processors (VPs), each VP being on a respective VP computing platform, and at least one distinct and separate machine vision user interface (UI), the at least one distinct and separate machine vision UI being on a respective distinct and separate machine vision UI computing platform, a method for instructing a machine vision UI in communication with a first distinct and separate VP to establish communication with a second distinct and separate VP, the method comprising:

providing a first distinct and separate VP with a link function, the first distinct and separate VP being on a first respective distinct and separate VP computing platform connected to a network, the link function being a control function executable by the first distinct and separate VP,

the link function being both for enabling a user to configure any second distinct and separate VP connected to the network using the at least one distinct and separate machine vision UI on a respective distinct and separate machine vision UI computing platform connected to the network, and for establishing communication via the network between the any second distinct and separate VP of the plurality of VPs and the at least one distinct and separate machine vision UI on the respective distinct and separate machine vision UI computing platform, the any second distinct and separate VP being on a second respective distinct and separate VP computing platform,

the communication via the network established by the link function enabling a continually updated image display on the at least one distinct and separate machine vision UI representing a current state of the any second distinct and separate VP connected to the network; ~~and~~

executing the link function so as to issue instructions via the network from the first distinct and separate VP to the distinct and separate machine vision UI to establish communication via the network with the any second distinct and separate VP; and

performing at least part of a machine vision task configured by the at least one distinct and separate machine vision UI, using at least one of the first distinct and separate VP and the any second distinct and separate VP, in accordance with the instructions issued by the first distinct and separate VP upon execution of the link function.

2. (Previously Presented) The method of claim 1, wherein the link function includes:

a VP control function having a plurality of parameters, including at least an identifier of the second VP.

3. (Previously Presented) The method of claim 1, wherein executing the link function includes:

clicking on a graphical representation of the link function displayed by the machine vision UI.

4. (Previously Presented) The method of claim 3, wherein the graphical representation of the link function is an underlined text string displayed by the machine vision UI.

5. (Previously Presented) The method of claim 1, wherein instructions from the first VP to the machine vision UI includes:

a plurality of parameters, including at least an identifier of the second VP, and at least one of a description of a view of the second VP, and a cursor position of the second VP.

6. (Previously Presented) The method of claim 1, wherein executing the link function is initiated by a user.

7. (Previously Presented) The method of claim 6, wherein executing the link function is initiated by a user via the at least one machine vision UI.

8. (Previously Presented) The method of claim 7, wherein the at least one machine vision UI includes a check box.

9. (Previously Presented) The method of claim 7, wherein the at least one machine vision UI includes a radio button.

10. (Previously Presented) The method of claim 1, wherein executing the link function is initiated by an external event.

11. (Original) The method of claim 10, wherein the external event is an industrial process event.

12. (Previously Presented) The method of claim 10, wherein the external event is a change in the state of a sensor.

13. (Previously Presented) The method of claim 1, wherein executing the link function is initiated by a programmatic decision

14. (Previously Presented) The method of claim 1, wherein executing the link function is initiated by a human decision.

15. (Previously Presented) The method of claim 1, wherein executing the link function includes:

including the link function in a function execution sequence of the VP.

16. (Previously Presented) The method of claim 1, wherein the link function also terminates communication with the first VP in addition to establishing communication with the second VP.

17. (Previously Presented): The method of claim 1, wherein the link function enables local dynamic display of images provided by a camera of the second VP on the at least one machine vision UI.

18. (Canceled)

19. (Canceled)

20. (Currently Amended) In a machine vision system having a plurality of distinct and separate vision processors (VPs), each VP being on a respective distinct and separate VP computing platform and at least one distinct and separate machine vision user interface (UI), the at least one distinct and separate machine vision UI being on a respective distinct and separate machine vision UI computing platform, a method for instructing a machine vision UI in communication with a first distinct and separate VP to establish communication with a second distinct and separate VP, the method comprising:

providing a graphical representation, included in the at least one distinct and separate machine vision UI, the graphical representation being adapted to respond to user action so as to cause the first distinct and separate VP on a first respective distinct and separate VP computing platform connected to a network to instruct the at least one distinct and separate machine vision UI on a respective distinct and separate machine vision UI computing platform connected to the network to establish communication via the network with any second distinct and separate VP on a second respective distinct and separate VP computing platform connected to the network,

the communication via the network enabling a continually updated image display on the at least one distinct and separate machine vision UI representing a current state of the any second distinct and separate VP, and enabling a user to configure the any second distinct and separate VP using the distinct and separate machine vision UI; and

performing at least part of a machine vision task configured by the at least one distinct and separate machine vision UI, using at least one of the first distinct and separate VP and the any second distinct and separate VP, in accordance with the instructions issued by the first distinct and separate VP.

21. (Canceled)

22. (Previously Presented) The machine vision system of claim 20, wherein the network supports a TCP/IP network protocol.

23. (Previously Presented) The machine vision system of claim 20, wherein the user action includes selecting the graphical representation.

24. (Previously Presented) The machine vision system of claim 20, wherein the user action is a mouse click upon the graphical representation.

25. (Original) The machine vision system of claim 20, wherein the graphical representation is an underlined text string.

26. (Currently Amended) A user interface (UI) for a machine vision system having a plurality of distinct and separate vision processors (VPs) including a first distinct and separate VP on a first respective distinct and separate VP computing platform, and a second distinct and

separate VP on a second respective distinct and separate VP computing platform, the user interface comprising:

a spread sheet; and

a graphical representation, the graphical representation being incorporated in the spreadsheet, the graphical representation being adapted to respond to user action so as to cause a first distinct and separate VP on a first respective distinct and separate VP computing platform to instruct the UI to establish communication via a network with any second distinct and separate VP of the plurality of VPs on a second respective distinct and separate VP computing platform, the communication via the network enabling a continually updated image display on the UI representing a current state of the any second distinct and separate VP, and enabling a user to configure the any second distinct and separate VP using the at least one UI;

wherein at least one of the first distinct and separate VP and the any second distinct and separate VP performs at least part of a machine vision task in accordance with the instructions issued by the first distinct and separate VP, the machine vision task being configured by the at least one distinct and separate machine vision UI.

27. (Previously Presented) The user interface (UI) of claim 26, wherein the graphical representation is further adapted to respond to user action so as to cause the UI to terminate communication with the first VP of the plurality of VP.

28. (Original) The user interface (UI) of claim 26, wherein the graphical representation is an underlined text string.

29. (Currently Amended) The user interface (UI) of claim 26, wherein the graphical representation is an ionic representation.

30. (Currently Amended) A machine vision system comprising:

a plurality of distinct and separate vision processors (VPs), each VP being on a respective distinct and separate VP computing platform connected to a network;

at least one distinct and separate machine vision user interface (UI), the at least one distinct and separate machine vision user interface (UI) being on a respective distinct and separate machine vision UI computing platform connected to the network, the machine vision UI being in communication via the network with a first distinct and separate VP of the plurality of VPs on a first respective distinct and separate computing platform, the machine vision UI including:

a graphical representation visible to a user, the graphical representation being adapted to respond to user action so as to cause the first distinct and separate VP to instruct the distinct and separate machine vision UI to establish communication via the network with any second distinct and separate VP of the plurality of VPs on a second respective distinct and separate computing platform, the communication via the network enabling a continually updated image display on the distinct and separate machine vision UI representing a current state of the any second VP, and enabling a user to configure via the network the any second distinct and separate VP using the distinct and separate machine vision UI;

wherein at least one of the first distinct and separate VP and the any second distinct and separate VP performs at least part of a machine vision task in accordance with the instructions

issued by the first distinct and separate VP, the machine vision task being configured by the at least one distinct and separate machine vision UI.

31. (Canceled)

32. (Previously Presented) The machine vision system of claim 30, wherein the network supports a TCP/IP network protocol.

33. (Original) The machine vision system of claim 30, wherein user action is a mouse click upon the graphical representation.

34. (Original) The machine vision system of claim 30, wherein the graphical representation is an underlined text string.